

Terrestrial Isopods from Sri Lanka, III: Philosciidae (Crustacea, Oniscidea): part 1

by

C. MANICASTRI * and S. TAITI **

With 9 figures

ABSTRACT

Six species of Philosciidae are recorded from Sri Lanka. Three genera (*Tropicana*, *Sinhaloscia*, *Serendibia*) and four species (*Tropicana minuta*, *Sinhaloscia dimorpha*, *Serendibia denticulata* and *Platycytoniscus granulatus*) are described as new. *Tropicana minuta* is also recorded from Hawaii Islands, Comoro Islands and Cameroon.

This paper represents the third contribution to the knowledge on terrestrial isopods from Sri Lanka (ARGANO & MANICASTRI 1979; MANICASTRI & ARGANO, 1986).

The family Philosciidae includes about 100 genera mainly tropical in distribution. While the philosciids of the Neotropical Region (VANDEL 1968; 1972; SCHMALFUSS 1980), the Afrotropical Region (SCHMALFUSS & FERRARA 1978; TAITI & FERRARA 1978; 1980; 1982; 1983; 1984; FERRARA & TAITI 1982a; 1982b; 1983; 1984; 1985a; 1985b; 1986; FERRARA & SCHMALFUSS 1983; 1985) and the Australian Region (VANDEL 1970a; 1973a; 1973b; 1977) have been revised according to modern systematic criteria, those from the Oriental Region are known only from sporadic and outmoded studies, often with few or no illustrations (BUDDE-LUND 1885; 1895; 1902; DOLLFUS 1898; COLLINGE 1914; 1915; 1916; RICHARDSON SEARLE 1922; CHOPRA 1924; ARCANGELI 1927; 1952; VERHOEFF 1928; 1936; HEROLD 1931; JACKSON 1931; 1936; SCHULTZ 1982; 1985). A revision of the philosciids from this region, also based on a re-examination of the types, was recently undertaken (VANDEL 1973c; FERRARA & TAITI 1982c; 1986; SCHMALFUSS 1983; TAITI & FERRARA,

* Istituto di Scienze Morfologiche, Università degli Studi di Urbino, via M. Oddi 23, 61029 Urbino, Italy.

** Centro di Studio per la Faunistica ed Ecologia Tropicali del Consiglio Nazionale delle Ricerche, via Romana 17, 50125 Firenze, Italy.

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1986a; 1986b) in order to clarify their intricate taxonomy and provide a reliable basis for phylogenetic and biogeographic hypotheses.

In Sri Lanka the family Philosciidae includes the largest number of species. This paper concerns the genera *Littorophiloscia* Hatch, 1947, *Tropicana* nov., *Sinhaloscia* nov., *Serendibia* nov., *Platycytoniscus* Herold, 1931 and *Pseudosetaphora* Ferrara & Taiti, 1986. A second paper is underway on species of the genus *Burmoniscus* Collinge, 1914 (= *Formososcia* Verhoeff, 1928 = *Rennelloscia* Vandel, 1970). Only one species of Philosciidae was previously recorded from Sri Lanka: *Philoscia comta* Budde-Lund, 1895 (ARCANGELI 1927: 262; 1952: 309). This species, originally described from Burma, was not found in the abundant material we examined and it is probable that ARCANGELI's identification is incorrect.

The bulk of the material studied was collected by P. Brinck, H. Andersson and L. Cederholm from the University of Lund during an expedition to Sri Lanka in 1962. The remainder of the material was collected by C. Besuchet and I. Löbl (Geneva), D. R. Davis and W. H. Rowe (Washington, D. C.), P. Beron (Sofia) and L. Bartolozzi (Florence).

For details on the collecting localities of the Lund University Ceylon Expedition see BRINCK *et al.* (1971).

Abbreviations used throughout the text:

BPBM: Bernice P. Bishop Museum, Honolulu;

LUCE: Lund University Ceylon Expedition 1962 (P. Brinck, H. Andersson and L. Cederholm);

MF: Museo Zoologico dell'Università, Firenze;

MHNG: Muséum d'Histoire naturelle, Genève;

MZUR: Museo Zoologico dell'Università, Roma;

NNHMS: National Natural History Museum, Sofia;

USNM: National Museum of Natural History, Smithsonian Institution, Washington, D.C.;

ZIUL: Zoological Institute, University of Lund.

Genus *Littorophiloscia* Hatch, 1947

Type-species: *Littorophiloscia richardsonae* (Holmes & Gay, 1909).

Littorophiloscia tropicalis Taiti & Ferrara, 1986.

MATERIAL examined. — SRI LANKA: 1♂, 5♀, North Western Prov., saltpan 3 mls N of Puttalam, loc. 41, leg. LUCE, 1.II.1962, ZIUL.

Remarks. — These specimens correspond perfectly to the description of *L. tropicalis*. The correct taxonomic status of this species is discussed in TAITI & FERRARA (1986a).

Distribution. — Tropical shores of Atlantic and Indian Oceans.

Tropicana gen. n.

Type-species: *Tropicana minuta* sp. n.

DIAGNOSIS. — Sulcus marginalis and gland pores absent. Each pereonite with one nodulus lateralis per side; d/c co-ordinates with an evident peak on pereonite 4. Frontal line absent, supra-antennal line present. Epimera of pleon reduced, but with well developed

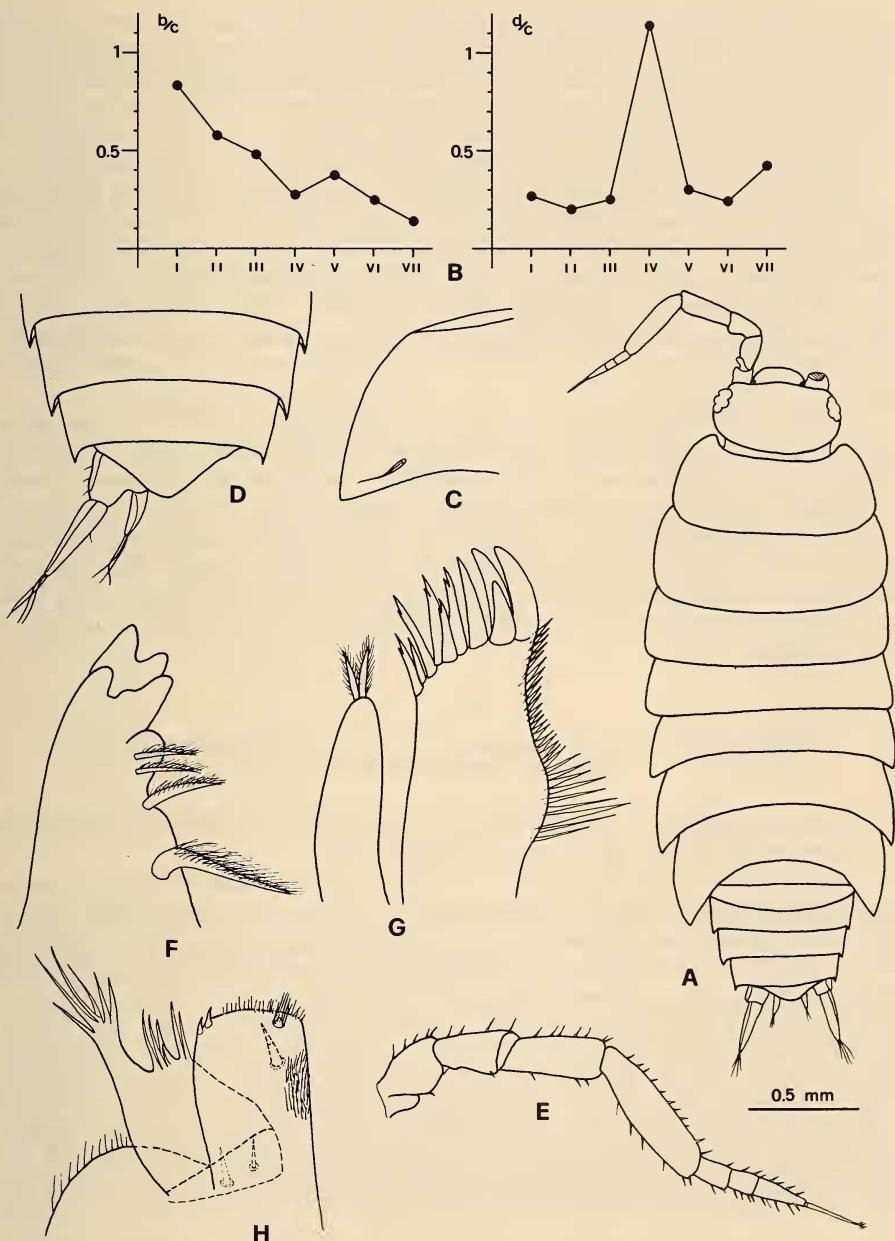


FIG. 1.

Tropicana minuta gen. n., sp. n.: A) adult male in dorsal view; B) co-ordinates of the noduli laterales; C) left epimeron of the pereonite 7; D) pleonites 3-5, telson and left uropod; E) antenna; F) mandible; G) maxillule; H) maxilliped.

posterior points clearly visible in dorsal view. Molar penicil of mandible consisting of a single unbranched seta. Maxillule outer branch with 4+6 (5 cleft) teeth; inner branch with two long thin penicils and no posterior point. Endite of maxilliped with a penicil. Pleopod exopodites without respiratory areas. Uropod protopodite grooved on outer margin; insertion of endopodite proximal to that of exopodite.

Etymology. — The name refers to the tropical distribution of the type-species.

Remarks. — *Tropicana* belongs to the group of intertropical genera of philosciids characterized by one row of noduli laterales per side with an evident eccentricity of the nodulus lateralis on pereonite 4. This group includes at least eight other genera¹: *Xiphoniscus* Vandel, 1968, *Erophiloscia* Vandel, 1972 and *Atlantoscia* Ferrara & Taiti, 1981 from South America; *Uluguroscia* Taiti & Ferrara, 1980 from East Africa; *Pseudosetaphora*, Ferrara & Taiti, 1986 from West Indian Ocean islands; *Papuaphiloscia* Vandel, 1970, *Isabelloscia* Vandel, 1973 and *Leucophiloscia* Vandel, 1973 from the Pacific area.

The new genus differs mainly from *Xiphoniscus*, *Erophiloscia*, *Isabelloscia* and *Atlantoscia* in having the molar penicil of the mandible simple instead of compound; from *Uluguroscia* and *Leucophiloscia* in the presence of a penicil on the maxillipedal endite; from *Papuaphiloscia* in having cleft instead of simple teeth on the outer branch of the maxillule; from *Pseudosetaphora* in the different d/c co-ordinates of the noduli laterales (compare Fig. 1B and Fig. 7B in FERRARA & TAITI 1983 for *Pseudosetaphora ovata* (Budde-Lund, 1913)), in the long thin, rather than short and stout, penicils of the inner branch of the maxillule, and in the different position of the insertions of the uropod exo- and endopodite.

***Tropicana minuta* sp. n. (Figs 1-2)**

MATERIAL examined. — Holotype: HAWAIIAN ISLANDS: 1♂, Oahu, Poamoho Ridge, along the trail, rain forest, leg. S. Taiti, 22.XII.1984, MF.

Paratypes: Hawaiian Islands: many ♂♂ and ♀♀, Oahu, Poamoho Ridge, along the trail, rain forest, leg. S. Taiti, 22.XII.1984, MF; 2♂♂, 2♀♀, same data, BPBM; 3♂♂, 9♀♀, Oahu, along Manoa Stream, near University of Hawaii, leg. S. Taiti, 31.XII.1984, MF; 5♂♂, 14♀♀, Oahu, Manoa, near University of Hawaii, leg. S. Taiti, 21.XII.1984, MF; many ♂♂ and ♀♀, Hawaii, Kalapana, SE coast, leg. S. Taiti, 8.I.1985, MF; 2♂♂, 3♀♀, same data, MZUR; 6♂♂, 10♀♀, Hawaii, Kukuihala, SE coast, leg. S. Taiti, 8.I.1985, MF; 6♂♂, 7♀♀, Hawaii, Hilo, leg. S. Taiti, 7.I.1985, MF. SRI LANKA: 2♂♂, 6♀♀, Diyaluma, leg. C. Besuchet & I. Löbl, 25.I.1970, MHNG; 2♀♀, Kuruwita, leg. P. Beron, 1.XII.1984, NNHMS; 1♀, Sabaragamuwa Prov., stream at 725 m, 5 mls NNW of Balangoda, loc. 96, leg. LUCE, 22.II.1962, ZIUL; 3♀♀, Sabaragamuwa Prov., Deerwood, Kuruwita, 6 mls NNW of Ratnapura, loc. 90: III, leg. LUCE, 18-21.II.1962, ZIUL; 2♀♀, Sabaragamuwa Prov., Bopathella Falls, 9 mls NNW Ratnapura, loc. 91: I, leg.

¹ VANDEL (1973a: 53) includes *Chaetophiloscia* Verhoeff, 1908 and *Verhoeffiella* Vandel, 1970 in this group. However, *Chaetophiloscia* does not show similar co-ordinates of noduli laterales and therefore should not be included in this group (FERRARA & TAITI 1981). *Verhoeffiella* was erected by VANDEL (1970b: 381) for *Heroldia canalensis* Verhoeff, 1926. Since VANDEL's diagnosis is based exclusively on the unclear original description of that species, a re-examination of *H. canalensis* specimens is necessary to prove the validity of the genus *Verhoeffiella*.

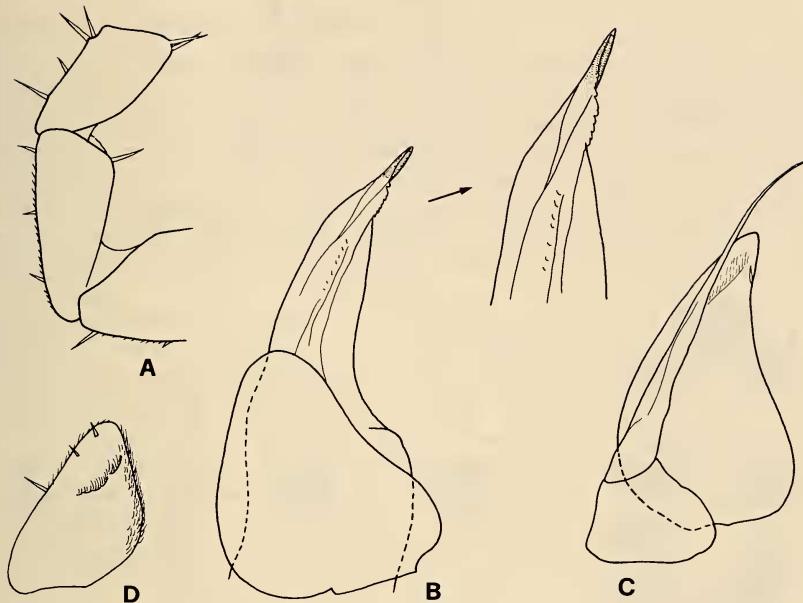


FIG. 2.

Tropicana minuta gen. n., sp. n., ♂: A) pereopod 7; B) pleopod 1; C) pleopod 2;
D) pleopod 5 exopodite.

LUCE, 19.II.1962, ZIUL. COMORO ISLANDS: 3♂♂, 13♀♀, Anjouan, Boungouéni, 300 m, litière de manguiers, leg. R Jocqué, 5.XII.1983, MRAC. CAMEROON: ? 1♀, Kribi, leg. F. Ferrara & H. Schmalfuss, 19.II.1980, MF.

DESCRIPTION. — Length: 3 mm. Body outline as in Fig. 1A. Brown with yellowish muscle spots. Eye with 7 ommatidia. Co-ordinates of noduli laterales as in Fig. 1B. Pereonite 7 with postero-lateral angle acute. Telson with almost straight sides and largely rounded apex. Antenna with fifth joint of peduncle longer than flagellum; ratio of flagellar joints 6: 5: 10; flagellar joints 2 and 3 with 1 and 2 aesthetascs respectively.

Male. Pereopods without sexually dimorphic modifications. Pleopod 1 exopodite cor-diform with largely rounded apex; endopodite with apical part pointed and finely striated, subapical part lobulate on outer margin. Pleopod 2 endopodite distinctly longer than exopodite. Pleopod 5 exopodite as in Fig. 2D.

Etymology. — *L. minutus* = very small. The name refers to the small size of this species (3 mm).

Remarks. — This species has a very wide distribution throughout the tropics. The specimen from Cameroon corresponds perfectly to the description of this species, but, since no males are available, the record is quoted with a question mark.

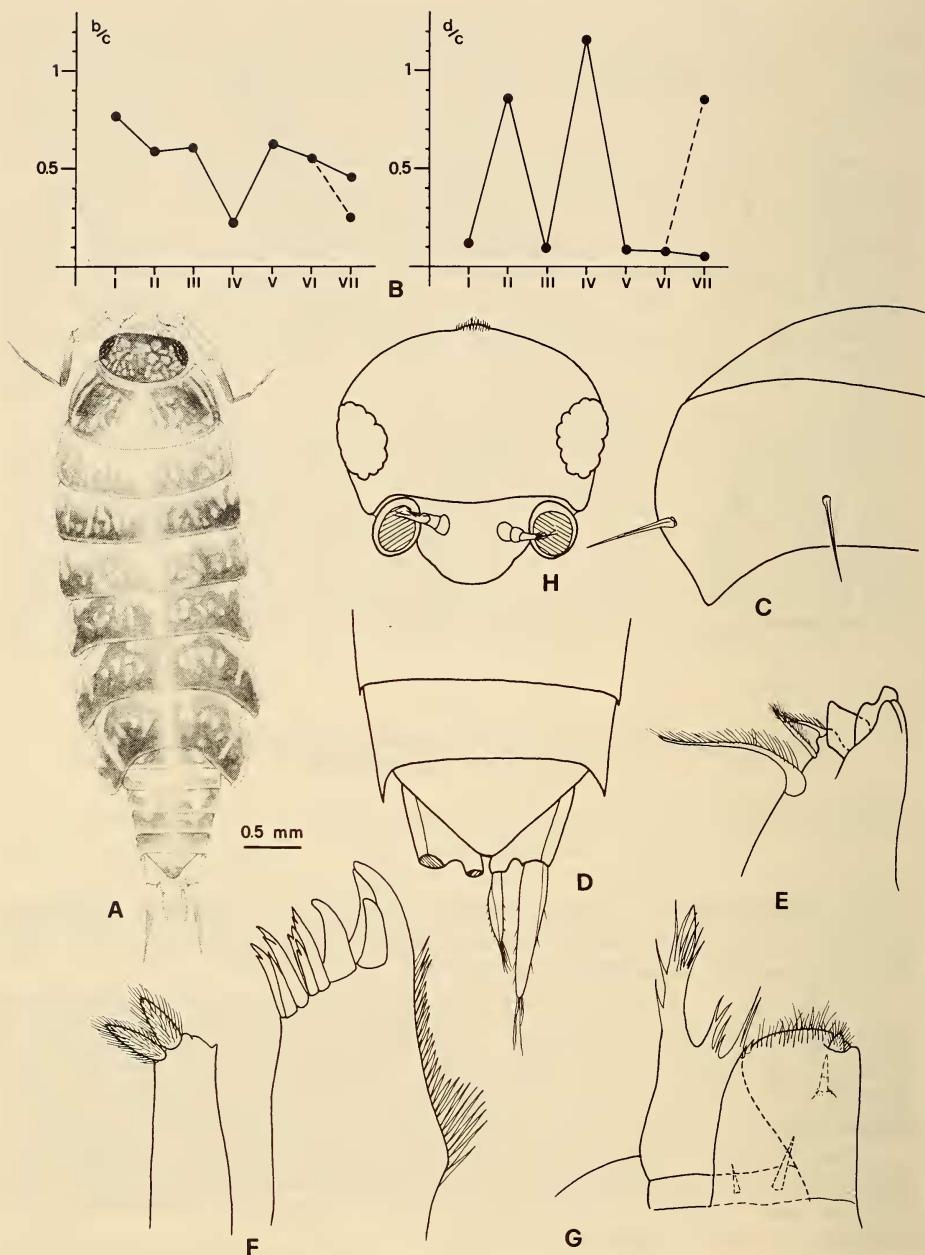


FIG. 3.

Sinhaloscia dimorpha gen. n., sp. n.: A) adult male in dorsal view;
 B) co-ordinates of the noduli laterales; C) left epimeron of the pereonite 7;
 D) pleonites 4-5, telson and uropods; E) mandible; F) maxillule; G) maxilliped; H) male cephalon.

Sinhaloscia gen. n.

Type-species: *Sinhaloscia dimorpha* sp. n.

DIAGNOSIS. — Sulcus marginalis and gland pores absent. Pereonites 1-6 with one nodulus lateralis per side; pereonite 7 with two noduli laterales per side; d/c co-ordinates with peaks on pereonites 2 and 4. Frontal line absent, supra-antennal line present. Pleon epimera reduced, adpressed. Molar penicil of mandible consisting of a single unbranched seta. Outer branch of maxillule with 4+6 (5 cleft) teeth; inner branch with two subequal penicils and a small posterior point. Endite of maxilliped with a penicil. Pereopods with an evident flagelliform dactylar seta. Pleopod exopodites without respiratory areas. Uropod protopodite grooved on outer margin; insertion of endopodite slightly distal to that of exopodite.

Etymology. — Sanskrit: *Sinhala* = Sri Lanka + *oscia*.

Remarks. — The new genus is easily distinguished from all the other genera of philosciids found in Sri Lanka by the disposition of the noduli laterales (d/c co-ordinates with a peak on pereonites 2 and 4, and two noduli on each side of pereonite 7). This character is only found in a group of genera from West Africa: *Congophiloscia* Arcangeli, 1950, *Gabunoscia* Schmalfuss & Ferrara, 1978, *Togoscia* Schmalfuss & Ferrara, 1978, *Vandelphiloscia* Schmalfuss & Ferrara, 1978, *Zebrascia* Verhoeff, 1942 and *Leonoscia* Ferrara & Schmalfuss, 1985. All these genera are characterized by the absence of supra-antennal line and constitute an homogeneous group. The presence of a supra-antennal line in *Sinhaloscia* clearly separates this genus from the West African genera. *Sinhaloscia* appears very close to *Burmoniscus* Collinge, 1914 from which it differs essentially in having two noduli laterales per side on pereonite 7.

Sinhaloscia dimorpha sp. n. (Figs 3-4)

MATERIAL examined. — Holotype: SRI LANKA: 1♂, Central Prov., Hakgala, 5 mls SE Nuwara-Eliya, indigenous forest, loc. 114: II, leg. LUCE, 3.III.1962, MHNG.

Paratypes: Sri Lanka: 2♂♂, 2♀♀, Central Prov., Hakgala, 5 mls SE Nuwara-Eliya, indigenous forest, loc. 114: II, leg. LUCE, 3.III.1962, MHNG; 13♂♂, 11♀♀, same data, ZIUL; 2♂♂, 2♀♀, same data, MF; 2♂♂, 2♀♀, same data, MZUR; 5♂♂, 6♀♀, Central Prov., Horton Plains, 2100 m, 12 mls SSE Nuwara-Eliya, loc. 163, leg. LUCE, 19.III.1962, ZIUL; 2♂♂, 6♀♀, Central Prov., Horton Plains, 2000 m, 11 mls SSE Nuwara-Eliya, indigenous forest, loc. 162, leg. LUCE, 19-20.III.1962, ZIUL; 1♂, 3♀♀, Central Prov., Mt. Pidurutalagala, 1 ml N Nuwara-Eliya, leg. D. R. Davis & W. H. Rowe, 14.II.1970, USNM; 1♂, Central Prov., Kandapola, 5 mls ENE Nuwara-Eliya, 1900 m, loc. 115, leg. LUCE, 4.III.1962, ZIUL; 1♂, Central Prov., Nuwara-Eliya, leg. D. R. Davis & W. H. Rowe, 10-21.II.1970, USNM; 1♀, Central Prov., Nuwara-Eliya, leg. L. Bartolozzi, 26.XI.1984, MF; 2♀♀, Central Prov., Pidurutalagala, 2 mls N Nuwara-Eliya, 1900 m, loc. 116: II, leg. LUCE, 4.III.1962, ZIUL; 1♀, Central Prov., Horton Plains, leg. C. Besuchet & I. Löbl, 15.II.1970, MHNG; 2♀♀, Central Prov., Mudduk, 5 mls NW Nuwara-Eliya, 1000 m, loc. 117, leg. LUCE, 4.III.1962, ZIUL; 3♀♀, NE Dist., Kanda-Ela Reservoir, 56 mls SW Nuwara-Eliya, leg. D. R. Davis & W. H. Rowe, 10-21.II.1970, USNM.

DESCRIPTION. — Length: 5 mm. Body outline as in Fig. 3A. Colour variable; usually brown mottled with yellow; pereonites pale on anterior half; sometimes pereonites 2 and

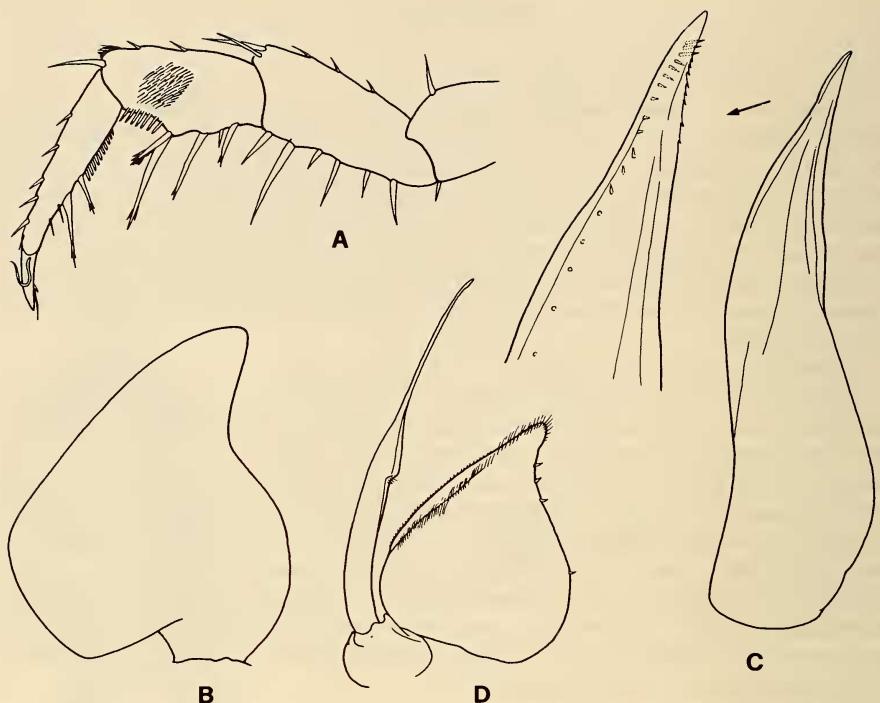


FIG. 4.

Sinhaloscia dimorpha gen. n., sp. n., ♂: A) pereopod 1; B) pleopod 1 exopodite; C) pleopod 1 endopodite; D) pleopod 2.

4 are lighter than the others. Eye with 14-16 ommatidia. Co-ordinates of noduli laterales as in Fig. 3B. Pereonite 7 with postero-lateral corners subacute. Epimera of pleon with very small posterior points slightly visible in dorsal view. Telson with almost straight sides and rounded apex. Antenna with fifth joint of peduncle as long as flagellum; flagellar joints subequal. Uropod endopodite laterally flattened.

Male. Cephalon with a setose tubercle near the posterior margin of the vertex. Pereopods without evident sexually dimorphic specializations. Pleopod 1 exopodite with a triangular posterior point, outer margin sinuous; endopodite with pointed apical part, equipped with some small teeth on outer margin and a row of short spines. Pleopod 2 endopodite styliform, much longer than exopodite.

Etymology. — *G. dimorphos* = dimorphic. The name refers to the sexually dimorphic character of the cephalon, i.e. the presence of a setose tubercle on the male vertex.

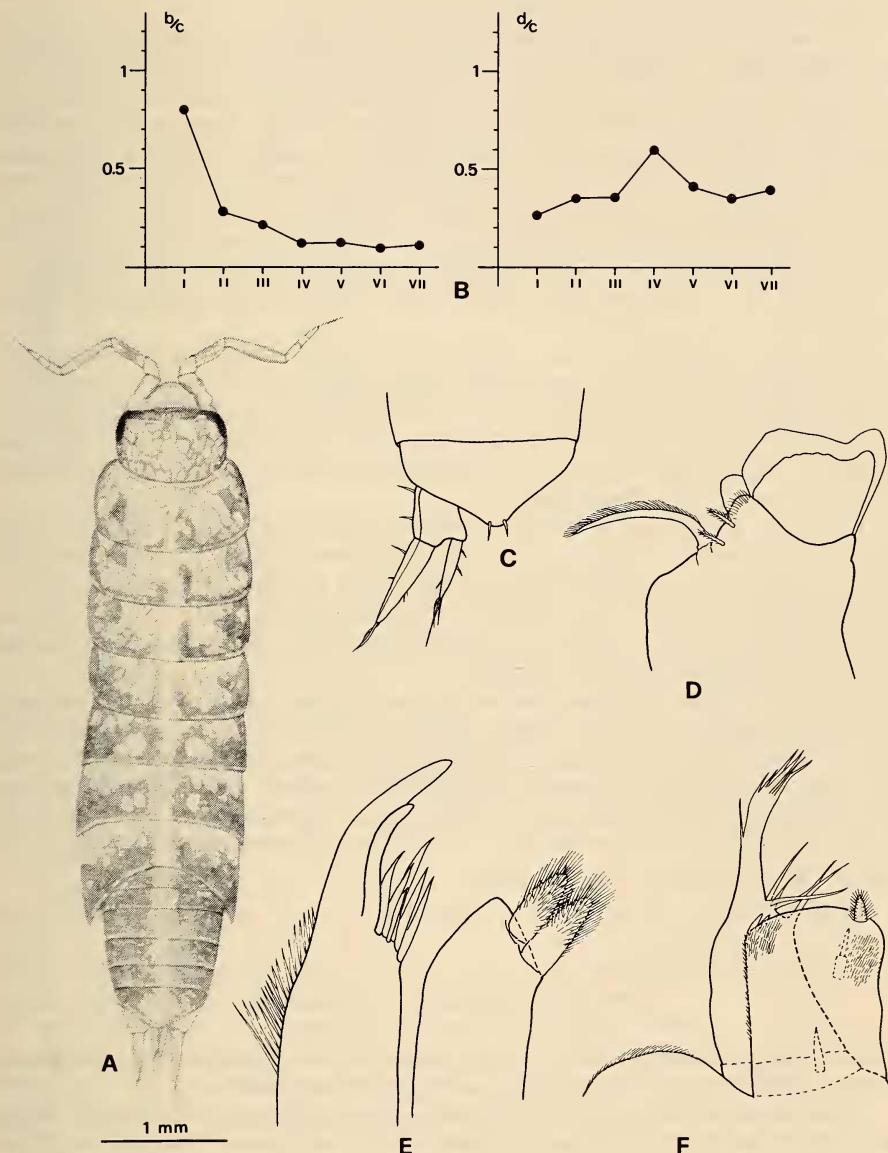


FIG. 5.

Serendibia denticulata gen. n., sp. n.: A) adult female in dorsal view;
B) co-ordinates of the noduli laterales; C) pleonite 5, telson and left uropod; D) mandible;
E) maxillule; F) maxilliped.

Serendibia gen. n.

Type-species: *Serendibia denticulata* sp. n.

DIAGNOSIS. — Very elongated body with parallel sides. Sulcus marginalis and gland pores absent. Each pereonite with one nodulus lateralis per side; nodulus lateralis on pereonite 1 close to the anterior margin; d/c co-ordinates with a small but evident peak on pereonite 4. Frontal line absent, supra-antennal line present. Pleon epimera reduced, adpressed, without posterior points. Molar penicil of mandible consisting of a single unbranched seta. Outer branch of maxillule with 2+6 teeth, all simple; inner branch with two penicils inserted on medial margin. Endite of maxilliped with a penicil. Pereopods without dactylar seta. Pleopod exopodites without respiratory areas. Uropod protopodite grooved on outer margin; insertions of exo- and endopodite almost at the same level.

Etymology. — The name of the genus refers to Serendib, the Arabian name of Sri Lanka.

Remarks. — *Serendibia* is close to *Paraphiloscia* Stebbing, 1900 from Melanesia, from which it differs in the d/c coordinates of the noduli laterales with a peak on pereonite 4 (in *Paraphiloscia* the noduli laterales are all at the same distance from the lateral margin, see Figs 79, 82 in VANDEL 1973a), the number of teeth on outer branch of the maxillule (8 instead of 5), the insertion of exo- and endopodite at almost the same level instead of being spaced apart as in *Paraphiloscia*.

This genus is also close to *Philoscina* Ferrara & Taiti, 1985 from South Africa and Aldabra Island, and to *Adeloscia* Vandel, 1977 from New Zealand. It differs from both mainly in the b/c and d/c co-ordinates of the noduli laterales (compare Fig. 5B and Figs 72, 79 in FERRARA & TAITI 1985a for *Philoscina*, and Fig. 21 in VANDEL 1977 for *Adeloscia*). Moreover, *Philoscina* lacks the maxillipedal penicil; in *Adeloscia* this character is not clear (see FERRARA & TAITI 1985a).

Three other genera of philosciids have the same elongated body: *Perinetia* Barnard, 1958 from Madagascar, *Puteoscia* Vandel, 1981 from Cuba, and *Javanoscia* Schultz, 1985 from Java. *Perinetia* is probably synonymous with *Paraphiloscia* (see TAITI & FERRARA 1980: 68), while the other two genera are insufficiently defined, especially in the number and position of the noduli laterales, so that a safe comparison is impossible. Re-examination of the material studied by VANDEL (1981) and SCHULTZ (1985) is necessary to complete the diagnosis of those two genera.

***Serendibia denticulata* sp. n. (Figs 5-6)**

MATERIAL examined. — Holotype: SRI LANKA: 1♂, Sabaragamuwa Prov., Deerwood, Kuruwita, 300-350 m, loc. 90: II: 1, leg. LUCE, 18.II.1962, MHNG.

Paratypes: Sri Lanka: 1♂, 1♀, Sabaragamuwa Prov., Deerwood, Kuruwita, 300-350 m, loc. 90: II: 1, leg. LUCE, 18.II.1962, MHNG; 2♂♂, 5♀♀, same data, ZIUL; 2♂♂, 2♀♀, same data, MF; 2♂♂, 2♀♀, same data, MZUR; 3♂♂, 12♀♀, Sabaragamuwa Prov., Deerwood, Kuruwita, 6 mls NNW Ratnapura, loc. 90: III, leg. LUCE, 18-21.II.1962, ZIUL; 2♀♀, Sabaragamuwa Prov., Carney, 8 mls NE Ratnapura, 300 m, loc. 94, leg. LUCE, 20.II.1962, ZIUL; 1♂, 1♀, Sabaragamuwa Prov., Bopathella Falls, 9 mls NNW Ratnapura, 40 m, loc. 91: I, leg. LUCE, 19.II.1962, ZIUL; 1♀, Sabaragamuwa Prov., Maratenna, 7 mls N Balangoda, 1400 m, loc. 98, leg. LUCE, 22.II.1962, ZIUL; 1♂,

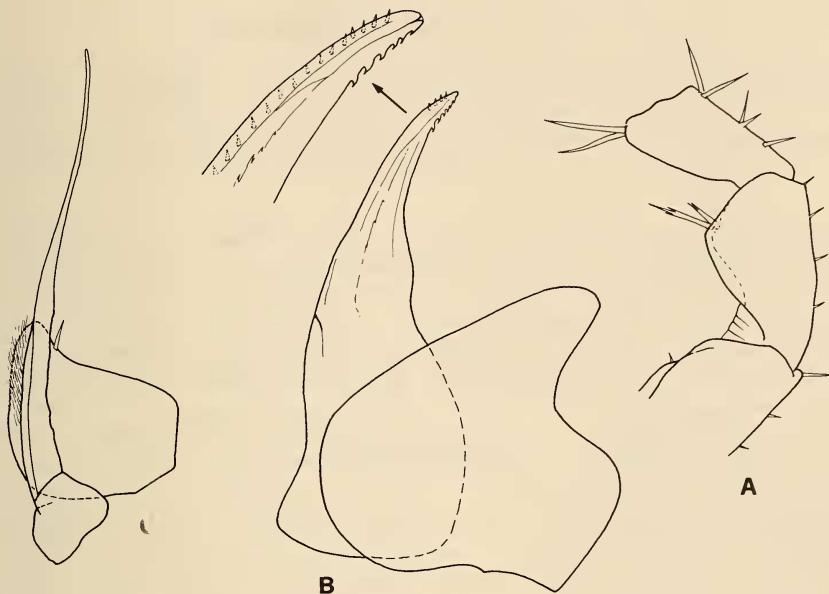


FIG. 6.

Serendibia denticulata gen. n., sp. n., ♂: A) pereopod 7; B) pleopod 1; C) pleopod 2.

Sabaragamuwa Prov., Ratnapura, leg. C. Besuchet & I. Löbl, 21.I.1970, MHNG; 2♂♂, 3♀♀, Sabaragamuwa Prov., Kuruwita, leg. P. Beron, 1.XII.1984, NNHMS; 1♀, North Central Prov., Wilpattu Nat. Park, intermediate zone, 29 mls NE Puttalam, 75 m, loc. 47, leg. LUCE, 2.III.1962, ZIUL; 1♀, Southern Prov., Haycock Mt., 21 mls NNE Galle, 325 m, loc. 34: I, leg. LUCE, 29.I.1962, ZIUL; 1♀, Diyaluma, leg. C. Besuchet & I. Löbl, 25.I.1970, MHNG; 3♀♀, Western Prov., Alawala, 26 mls NE Colombo, about 150 m, loc. 13: II, leg. LUCE, 17.I.1962, ZIUL; 1♀, Uva Prov., Yalakumbura, 5 mls SSW Bibile, 450 m, loc. 140, leg. LUCE, 13.III.1962, ZIUL.

DESCRIPTION. — Length: ♂, 4.5 mm; ♀, 5.5 mm. Body outline as in Fig. 5A. Brown with yellowish muscle spots. Eye with 10 ommatidia. Noduli laterales with b/c and d/c co-ordinates as in Fig. 5B. Pereonite 7 with postero-lateral corner acute. Telson with almost straight sides, rounded apex. Antenna with fifth joint of peduncle slightly longer than flagellum; flagellar joints subequal.

Male. Pereopods without sexually dimorphic modifications. Pleopod 1 exopodite with an evident rounded posterior point bent outwards, outer margin strongly sinuous; endopodite with apical part bent outwards and equipped with some denticles on outer margin. Pleopod 2 endopodite styliform, about 2.5 times longer than exopodite.

Etymology. — *L. denticulatus* = denticulate. The name refers to the denticulate outer margin of the apical part of the male pleopod 1 endopodite.

Genus *Platycyoniscus* Herold, 1931

Type-species: *Platycyoniscus spinosus* Herold, 1931.

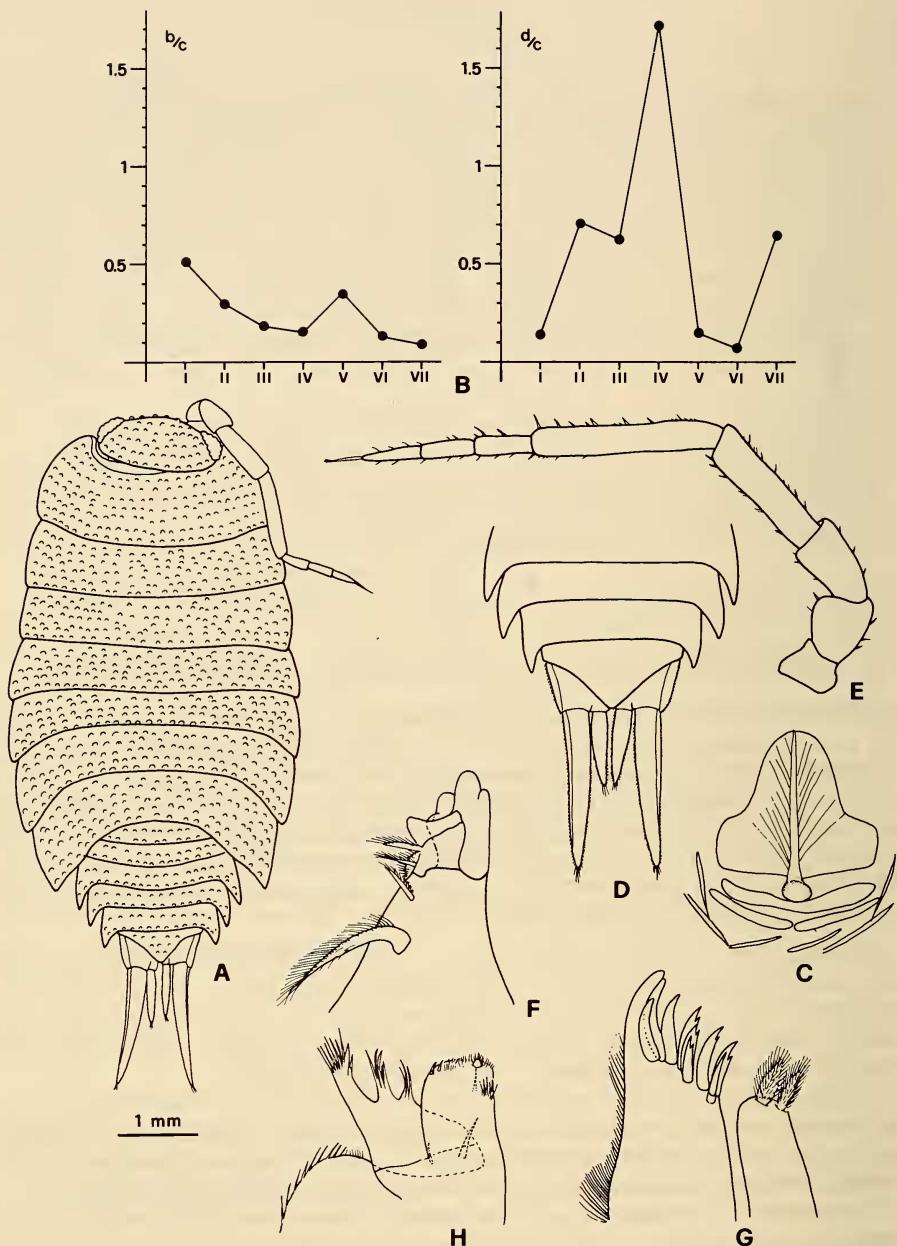


FIG. 7.

Platycyoniscus granulatus sp. n.; A) holotype in dorsal view; B) co-ordinates of the noduli laterales; C) scale-spine; D) pleonites 3-5, telson and uropods, ♀; E) antenna; F) mandible; G) maxillule; H) maxilliped.

Platycyoniscus granulatus sp. n. (Figs 7-8)

MATERIAL examined. — Holotype: SRI LANKA: 1♂, Central Prov., Horton Plains, 11 mls SSE Nuwara-Eliya, 2000 m, loc. 162, leg. LUCE, 19-20.III.1962, ZIUL.

Paratype: Sri Lanka: 1♀, Central Prov., Horton Plains, 11 mls SSE Nuwara-Eliya, 2000 m, loc. 162, leg. LUCE, 19-20.III.1962, ZIUL.

DESCRIPTION. — Length: ♂, 7 mm; ♀, 5.5 mm. Greyish-brown with yellowish muscle spots. Body slightly convex; outline as in Fig. 7A. Dorsum strongly granulated; granulations arranged without apparent order on vertex and pereonites, arranged in two rows on pleonites; each granulation bears a large scale-spine on top. Gland pores absent. Noduli laterales with d/c co-ordinates showing an evident peak on pereonite 4. Eye with about 22 ommatidia. Cephalon without lateral lobes; frontal line absent, supra-antennal line evident. Pereonite 1 with slightly concave posterior margin. Pereonites 2-7 with postero-lateral corners pointing backwards. Pereonite 7 with posterior margin slightly sinuous at sides; postero-lateral corner subacute. Pleon epimera strongly produced with long posterior points bent backwards. Telson triangular with slightly concave sides. Antenna with fifth joint of peduncle as long as flagellum; flagellar joints subequal. Molar penicil of mandible consisting of a single unbranched seta. Maxillule outer branch with 4+6 (5 cleft) teeth; inner branch with two subequal penicils and without posterior point. Endite of maxilliped with a setose apex bearing a penicil. Uropod protopodite grooved on outer margin; exopodite very long, about twice as long as endopodite; insertions of exo- and endopodite at the same level.

Male. Pereopod 1 carpus with a brush of short setae on rostral surface and a row of strong spines on sternal margin. Pereopod 7 ischium with sternal margin straight. Pleopod 1 exopodite with a short triangular posterior point bent outwards; endopodite with a triangular distal part slightly bent outwards without particular modifications. Pleopod 2 endopodite as long as exopodite. Pleopod 5 exopodite as in Fig. 8F.

Etymology. — *L. granulatus* = granulated. The name refers to the granulated dorsum of this species.

Remarks. — *Platycyoniscus* was erected by HEROLD (1931) to include *P. spinosus* from Flores (Indonesia). The specimens from Sri Lanka are ascribed to this genus mostly for the general shape of the body and strong granulations on the dorsum. However, the new species differs from *P. spinosus* in the slightly concave instead of straight posterior margin of pereonite 1, the postero-lateral corners of pereonites 2-7 instead of only pereonites 5-7 pointing backwards, the inner teeth of the outer branch of the maxillule cleft instead of simple, the longer uropod exopodites, the insertions of exo- and endopodite of the uropod at the same level instead of spaced apart.

Some of these characters, especially the maxillular teeth, are considered of generic value in the modern systematics of philosciids. Therefore, the species described here may belong to a distinct genus. Re-examination of the type-species of *Platycyoniscus* is necessary to clarify the problem.

Pseudosetaphora Ferrara & Taiti, 1986

Type-species: *Setaphora ovata* Budde-Lund, 1913.

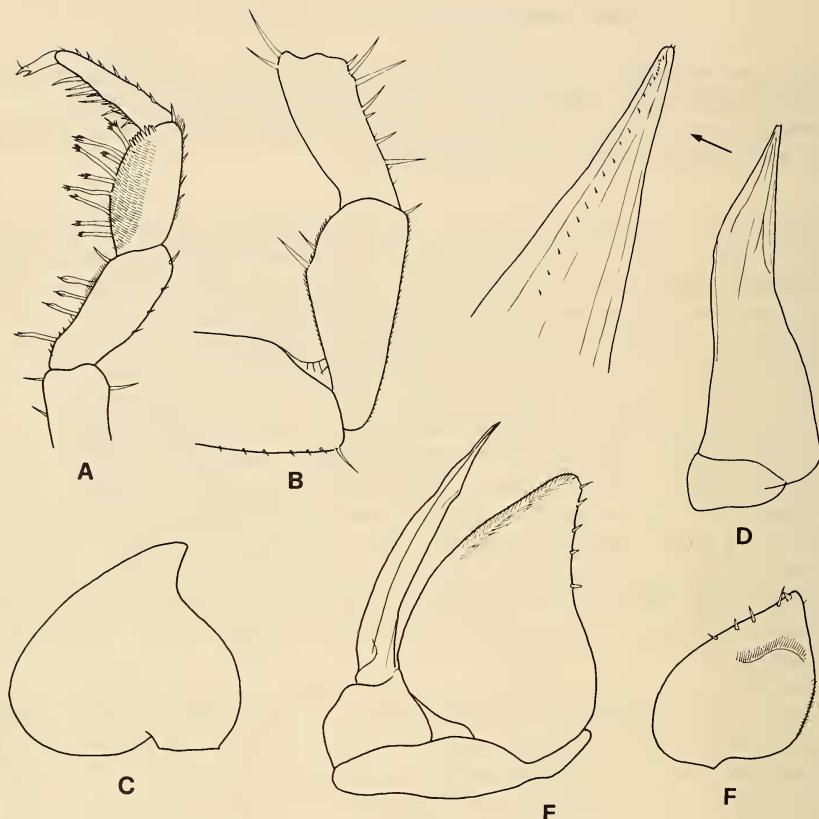


FIG. 8.

Platycytoniscus granulatus sp. n., ♂: A) pereopod 1; B) pereopod 7; C) pleopod 1 exopodite; D) pleopod 1 endopodite; E) pleopod 2; F) pleopod 5 exopodite.

Pseudosetaphora sp. (Fig. 9)

MATERIAL examined. — SRI LANKA: 1♀, Central Prov., stream 2 mls E Madugoda, 18 mls E Kandy, loc. 134, leg. LUCE, 12.III.1962, ZIUL; 1♀, Central Prov., Hakgala, 5 mls SE Nuwara-Eliya, 1900 m, loc. 114: II, leg. LUCE, 3.III.1962, ZIUL; 2♀♀, Sabaragamuwa Prov., Karagal-Oya, 3 mls ENE Belihul-Oya, 600 m, loc. 110, leg. LUCE, 2.III.1962, ZIUL; 9♀♀, Uva Prov., Gampaha Estate, 9 mls W Badulla, 1700 m, loc. 145, leg. LUCE, 14.III.1962, ZIUL; 4♀♀, Uva Prov., Westminster Abbey, 25 mls ESE Bibile, 450 m, loc. 119: III, leg. LUCE, 7.III.1962, ZIUL; 1♀, Sabaragamuwa Prov., stream from Mantalawa Mt., 2 mls NNE Belihul-Oya, 1000-1600 m, loc. 107, leg. LUCE, 1.III.1962, ZIUL.

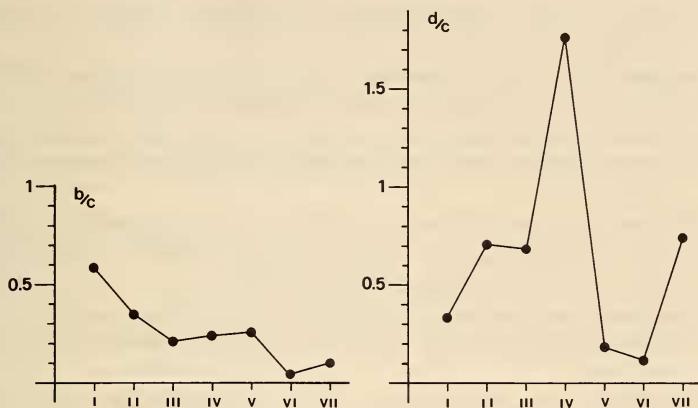


FIG. 9.

Pseudosetaphora sp.: co-ordinates of the noduli laterales.

Remarks. — These specimens belong to the genus *Pseudosetaphora* as defined by FERRARA & TAITI (1986). Fig. 9 shows the co-ordinates of the noduli laterales which are typical of this genus. Since no males are available, a full identification is not possible.

RÉSUMÉ

Dans ce premier travail sur les Philosciidae de Sri Lanka six espèces sont étudiées. Trois genres (*Tropicana*, *Sinhaloscia* et *Serendibia*) et quatre espèces (*Tropicana minuta*, *Sinhaloscia dimorpha*, *Serendibia denticulata* et *Platyctyoniscus granulatus*) sont nouveaux pour la science. *Tropicana minuta* a été recueillie aussi aux îles Hawaii, aux îles Comores et dans le Cameroun.

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